



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460**

OFFICE OF
PREVENTION,
PESTICIDES AND
TOXIC SUBSTANCES

February 19, 2009

DP BARCODE: D360604

MRID: 476277-00, 476277-01

SUBJECT: UCARCIDE™ 14 Antimicrobial

REG. NO. OR FILE SYMBOL: 464-700

DOCUMENT TYPE: Product Chemistry Review

Manufacturing-use ☐ OR End-use Product ☒

INGREDIENTS (PC Codes) Glutaraldehyde (043901), n-Alkyl (50% C₁₄, 40% C₁₂, 10% C₁₆)
dimethyl benzyl ammonium chloride (069105)

CAS Number: (111-30-8), (68424-85-1)

TEST LAB:

SUBMITTER: The Dow Chemical Company

GUIDELINE: 830.1800 Enforcement Analytical Method

COMMODITIES: Formulation

REVIEWER: Juan F. Negrón

ORGANIZATION: AD

APPROVER: Karen P. Hicks

APPROVED DATE: 02/19/09

COMMENT:



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MEMORANDUM

Subject: Product Chemistry Review for EPA Reg # 464-700.

From: Juan F. Negrón, Chemist
Product Science Branch, CT Team
Antimicrobials Division (7510P)

Thru: Karen P. Hicks, CT Team Leader
Product Science Branch
Antimicrobials Division (7510P)

Thru: Michele E. Wingfield, Chief
Product Science Branch
Antimicrobials Division (7510P)

To: Marshall Swindell / Martha Terry
PM Team 33

APPLICANT: The Dow Chemical Company

Action code: 362

Due date: 03/03/09

Product Formulation
Active Ingredient(s)

	% by wt.
Glutaraldehyde	14.0
n-Alkyl (50% C ₁₄ , 40% C ₁₂ , 10% C ₁₆)	
dimethyl benzyl ammonium chloride	2.5

BACKGROUND:

The registrant, The Dow Chemical Company, has submitted an amendment application for the non-integrated end-use product, UCARCIDE™ 14 Antimicrobial. The registrant is updating the enforcement analytical method. The Product Chemistry Reviewer has received the following documents:

- A letter, dated 11/25/08. MRID # 476277-00.
- A label, dated 04/04/08.
- Application for pesticide amendment, dated 11/25/08.
- Certification with respect to citation of data, dated 11/25/08.
- Data matrix, dated 11/24/08.
- A study titled “ Glutaraldehyde concentration by Ppotentiometric Hydroxylamine Hydrochloride Titration.” MRID #476277-01.

FINDINGS:

1. No CSF was submitted.
2. The registrant submitted an update enforcement analytical method for eleven products which are; 464-700, 464-693, 464-688, 464-702, 464-692, 464-704, 464-690, 464-691, 464-689, 464-696, and 464-707. Registrant provided extra copies that contains letter, application for pesticide amendment, certification with respect to citation of data, and data matrix for the other EPA Registrations mentioned above.
3. The registrant updated the analytical method to cover a wider range of active ingredient (AI) concentration to be from 1% to 50% of glutaraldehyde.
4. On page 9 of 11, the AI concentration has been tested from 12.8% to 50%.
5. On page 11 of 11, the linearity indicates that the titrator response was found to be linear over the nominal concentration range of 15 to 50% (wt/wt) glutaraldehyde in water.

RECOMMENDATIONS:

1. The product needs to be tested for 1% instead of 12.8% as the lower range.
2. The linearity range must be below 1% as the lower range and not 15%.

CONCLUSIONS:

The enforcement analytical method is not acceptable. The proposed amendment is not acceptable. The method does not cover the range that the registrant proposed.